

## **ABSTRACT**

5       A protective acoustic cover assembly including a metal foil with  
perforations, and a treatment on one or more surfaces of said metal foil. The  
treatment is a hydrophobic or oleophobic treatment, or both. The protective  
acoustic cover assembly has an average specific acoustic resistance of less than  
about 11 Rayls MKS from 250-300 Hz, an average specific acoustic reactance  
magnitude of less than about 1 Rayls MKS from 250-300 Hz, and an  
10       instantaneous water entry pressure value of greater than about 11 cm. The  
perforations of the metal foil preferably have an average maximum pore size of  
less than about 150 micrometers. The protective acoustic cover assembly further  
includes an adhesive mounting system, and the preferred metal foil is nickel.